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### UNITED STATES PATENT AND TRADEMARK OFFICE

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#### BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DONALD W. KEMP, CHRISTOPHER P. AGUAS, BRIAN O'NEALE BETTINGER, THOMAS G. ROMARY, and HUGH HERRICK BIRCH

Appeal 2016-004736 Application 13/345,448 Technology Center 3600

Before ST. JOHN COURTENAY III, KRISTEN DROESCH, and JOHN D. HAMANN, *Administrative Patent Judges*.

COURTENAY, Administrative Patent Judge.

#### **DECISION ON APPEAL**

#### STATEMENT OF THE CASE

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–25. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

#### The Invention

The disclosed and claimed invention on appeal relates:

generally to systems and methods for tracking price changes for a purchase made using a transaction card and, more particularly, to systems and methods for tracking a subsequent reduction in price of a purchase made by a cardholder using a transaction card, and compensating the cardholder by providing, or arranging for the provision of, an item of value to the cardholder valued at least a portion of the price reduction.

(Spec.  $\P 2$ ).

#### Independent Claim 1

1. A computer-based method for tracking a price change of a purchase made using a transaction card over an interchange network, the interchange network including an interchange computing device and a price tracking computer device in communication with a memory device, said method comprising:

receiving, at the interchange computing device included within the interchange network, transaction data associated with a purchase of an item by a cardholder using the transaction card, wherein the interchange computing device receives and authorizes a plurality of cardholder transactions including the purchase of the item, wherein the interchange computing device settles funds between a plurality of financial institutions for the plurality of cardholder transactions;

transmitting, from the interchange computing device via the interchange network, an authorization message in response to the purchase of the item;

directing at least some of the transaction data from the interchange computing device to the price tracking computer device including a purchase price of the item; and

using the price tracking computer device to track changes in a current asking price of the item, and compare the purchase price of the item to the current asking price of the item.

### Rejection

Claims 1–25 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter (i.e., a judicial exception). Final Act. 2.

#### **ANALYSIS**

We have considered all of Appellants' arguments and any evidence presented. Regarding the rejection of claims 1–25 under 35 U.S.C. § 101, we disagree with Appellants' arguments and we adopt as our own: (1) the findings and legal conclusions set forth by the Examiner in the Final Office Action (2–4), from which this appeal is taken, and (2) the corresponding findings, legal conclusions, and explanations, as set forth in the Answer (2–9), in response to Appellants' arguments. (App. Br. 4–10). We highlight and address specific findings and arguments for emphasis in our analysis below.

## Rejection under § 101 of Claims 1–25

<u>Issue</u>: Under § 101, did the Examiner err in concluding that claims 1–25 are directed to non-statutory subject matter?<sup>1</sup>

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." The Supreme Court, however, has long interpreted § 101 to include an implicit exception: "[1]aws of nature, natural phenomena, and abstract ideas are not patentable." *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013) (internal quotation marks

<sup>&</sup>lt;sup>1</sup> We give the contested claim limitations the broadest reasonable interpretation consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

omitted)). In *Alice*, the Supreme Court set forth an analytical "framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)).

The first step in our analysis is to determine whether the claims at issue are directed to a patent-ineligible concept, such as an **abstract idea**. *See Alice*, 134 S. Ct. at 2355.

If the claims are directed to a patent-ineligible concept, the **second step** in the analysis is to "consider the elements of each claim both individually and 'as an ordered combination' to determine whether [there are] additional elements [that] 'transform the nature of the claim' into a patent-eligible application." *Id.* (quoting *Mayo*, 132 S. Ct. at 1297).

In other words, the **second step** is to "search for an 'inventive concept'—*i.e.*, an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Id.* (brackets in original) (quoting *Mayo*, 132 S. Ct. at 1294).

# Alice — Step One

Regarding the judicially created "abstract idea" exception (*Alice*, Step One), Appellants contend, *inter alia*:

The Examiner's assertion that the claims are directed towards an "abstract idea" is completely lacking in any type of evidence, or any "reasoned rationale that identifies the judicial exception recited in the claim and why it is considered an exception." See 2015 Guidance at p. 6. Remarkably, the Examiner has failed to provide any rationale (much less a reasoned one) that identifies why the alleged abstract idea is

"considered an exception." *Id.* The Final Office Action provides no analysis regarding the identification of the **abstract idea**. Instead, page the Final Office Action merely states, "The Examiner notes that the above rejection uses the same standards and rationale as the rejection presented in the previous Office Action" and thereby attempts to incorporate the Office Action of August 15, 2014 ("2014 Office Action") into its analysis. Yet, even the 2014 Office Action does not cure the deficiency of the Examiner's analysis. The only analysis provided in the 2014 Office Action is found at page 4, which states, "Additionally, these claims are directed to tracking price changes, which is considered to be to be an **abstract idea**." The Examiner provides no "reasoned rationale" for his conclusion.

Such conclusory analysis falls far below the requirements set forth for subject matter eligibility analysis. The 2015 Guidance states, "the initial burden is on the examiner to explain why a claim or claims are unpatentable clearly and specifically, so that applicant has sufficient notice and is able to effectively respond." 2015 Guidance at p. 6. The Examiner has certainly not clearly and specifically explained the basis for his rationale. Further, at no point in prosecution has the Examiner identified any evidence that supports his assertions.

(App. Br. 5–6) (emphases added).

However, we conclude Appellants' claims 1–25 are analogous to the "offer-based pricing optimization" claims considered by the court in *OIP Technologies, Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir. 2015). In *OIP Tech.*, claim 1 was directed to a "method of pricing a product for sale," and the *OIP* specification described the invention as an "automatic pricing method and apparatus for use in electronic commerce." (*Id.*).

Appellants' claim 1 is similarly directed to "[a] computer-based method for tracking a price change of a purchase made using a transaction card." Appellants' remaining independent claims 9, 17, and 23 each recite similar or commensurate language.

In applying the reasoning of the court in *OIP Tech*. to the similar claims before us on appeal, we consider Appellants' claimed "method for tracking a price change of a purchase made using a transaction card" to be

similar to other "fundamental economic concepts" found to be abstract ideas by the Supreme Court and this court. See, e.g., Alice, 134 S. Ct. at 2357 (intermediated settlement); Bilski v. Kappos, 561 U.S. 593, 611, 130 S. Ct. 3218, 177 L.Ed.2d 792 (2010) (risk hedging); Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 715 (Fed. Cir. 2014) (using advertising as an exchange or currency); Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (data collection); Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1346 (Fed. Cir. 2013) (generating tasks in an insurance organization). And that the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract. See buySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1355 (Fed. Cir. 2014) (collecting cases); Accenture, 728 F.3d at 1345.

OIP Tech., 788 F.3d at 1362-63.

In light of the aforementioned guidance of our reviewing courts, and regarding the first *Alice* step in our analysis, we have reviewed all of Appellants' arguments and find them unpersuasive. (App. Br. 4–10; Reply Br. 1–4). We conclude each of the claims before us on appeal merely tracks a price change of a purchase made using a transaction card, **using a generic computer**.

Regarding the claimed steps or functions performed by a **computer**, we note the Supreme Court in *Alice* cautions that merely limiting the use of an abstract idea "to a particular technological environment" or implementing the abstract idea on a "wholly generic computer" is not sufficient as an additional feature to provide "practical assurance that the process is more

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than a drafting effort designed to monopolize the [abstract idea] itself." *Alice*, 134 S. Ct. at 2358 (internal quotation marks and citations omitted).

Applying this guidance here, we conclude each of Appellants' claims on appeal is distinguishable from the type of claim considered by the Federal Circuit in *Enfish*, *LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016). Here, we conclude none of Appellants' claims is "directed to an **improvement** in the functioning of a computer," as was found by the court regarding the subject claim in *Enfish*, 822 F.3d at 1338 (emphasis added).

Nevertheless, Appellants urge:

Claim 1 addresses a problem for which the claimed solution is, "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks" and, more specifically, in the realm of interchange payment networks. Indeed, independent Claim 1 recites in part, a "computer-based method for tracking a price change of a purchase made using a transaction card over an interchange network." Claim 1 utilizes and **leverages the interchange network** (i.e., a computer network) to receive specific transaction data required to implement the claimed invention. Therefore, like the claims of *DDR Holdings*, Claim 1 recites a "solution ... **necessarily rooted in computer technology** in order to overcome a problem specifically arising in the realm of computer networks."

(App. Br. 7) (emphasis added).

However, we conclude none of Appellants' claims is like the claim held patent-eligible by the court in *DDR*, in which the claimed invention was directed to the "challenge of retaining control over the attention of the customer in the context of the Internet," such that:

Instead of the computer network operating in its normal, expected manner by sending the website visitor to the third-party website that appears to be connected with the clicked

advertisement, the claimed system generates and directs the visitor to the above-described hybrid web page that presents product information from the third-party and visual "look and feel" elements from the host website.

DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245, 1258–59 (Fed. Cir. 2014).

Because we conclude all claims on appeal merely use a generic computer as a **tool** which is used in the way a computer normally functions, we conclude Appellants' claims 1–25 fail to impart any discernible improvement upon the computer (or computer network), nor have Appellants shown that the claims on appeal solve "a challenge particular to the Internet" as considered by the court in *DDR*, 773 F.3d at 1256–57.

Moreover, to the extent that Appellants' recited steps or acts (or functions) may be performed **faster or more efficiently** using a computer, our reviewing court provides applicable guidance:

While the claimed system and method certainly purport to accelerate the process of analyzing audit log data, the speed increase comes from the capabilities of a general-purpose computer, rather than the patented method itself. See Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.), 687 F.3d 1266, 1278 (Fed. Cir. 2012) ("[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter.").

FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089, 1095 (Fed. Cir. 2016) (emphases added).

Applying this reasoning to all of Appellants' claims on appeal, we similarly find any purported faster or more efficient performance of the claimed steps or acts (or functions) **merely comes from the capabilities of** 

**a general-purpose computer**, rather than from Appellants' claimed steps or functions.

Moreover, we find the claims considered by the Court in *Electric Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016) are also analogous to Appellants' claims, to the extent that Appellants' claims similarly collect information, analyze it in some fashion, and present or communicate the result. The Court in *Electric Power* guides: "we have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category." 830 F.3d at 1354 (internal citations omitted).

On this record, we find the aforementioned guidance from our reviewing courts supports the Examiner's legal conclusion:

since no specific technical activities required to perform the tracking and comparison are set forth in the claim, the steps can be considered human mental (i.e., performed entirely in the human mind) or manual (i.e., performed by a human operator using pen and paper) activities.

Thus, the claim can be reasonably construed to amount to some combination of fundamental economic practices, managing transactions or sales activities, creating a contractual relationship, and human mental/manual activities. Each of these types of ideas has been deemed abstract by the courts . . . .

(Ans. 4–5) (emphasis added).

Accordingly, we conclude all claims 1–25 on appeal are directed to an abstract idea. (*Alice* — Step One).

#### Alice — Step Two

Proceeding to step two of the *Alice* test articulated by the Supreme Court, we further "consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1298, 1297).

Regarding step two of the *Alice* analysis, Appellants contend, *interalia*:

Even assuming arguendo, that the claims are directed towards the alleged "abstract idea", the claims still contain "significantly more" than the alleged abstract idea of "tracking a price change." Under the *DDR Holdings* analysis, the claims of the present application are subject matter eligible. In *DDR Holdings*, Claim 19 of the '399 patent was found eligible because, although it is directed to an abstract idea, it "amounted to an inventive concept and thus was patent eligible." The court found the claim addresses significantly more than an abstract idea, i.e, the problem of website users being diverted from a host website to an advertiser website and that, "the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks."

Claim 1 addresses a problem for which the claimed solution is, "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks" and, more specifically, in the realm of interchange payment networks. Indeed, independent Claim 1 recites in part, a "computer-based method for tracking a price change of a purchase made using a transaction card over an interchange network." Claim 1 utilizes and leverages the interchange network (i.e., a computer network) to receive specific transaction data required to implement the claimed invention. Therefore, like the claims of *DDR Holdings*, Claim 1 recites a "solution ... necessarily rooted in computer technology

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in order to overcome a problem specifically arising in the realm of computer networks."

(App. Br. 7) (emphases added).

However, for the reasons discussed above, we conclude none of Appellants' claims is like the claim held patent-eligible by the court in *DDR*, in which the claimed invention was directed to the "challenge of retaining control over the attention of the customer in the context of the Internet." *DDR Holdings*, 773 F.3d at 1258.

Regarding step two of the *Alice* test, we find nothing in Appellants' claims 1–25 that adds anything "significantly more" to transform the abstract concepts into a patent-eligible application. For example, see claim 1 that is essentially directed to the following steps or acts: *receiving* transaction (purchase) data, transmitting an authorization message in response to the purchase, directing at least some of the transaction data to the price tracking computer device, and comparing the purchase price of the item to the current asking price of the item. See Alice, 134 S. Ct. at 2357. Therefore, we conclude the *nature* of claims 1–25 is not transformed into a patent-eligible application of the abstract idea presented, because these claims do nothing more than simply instruct the practitioner to implement an abstract idea using a generic computer.

Appellants do not argue that each of the steps or functions recited in claims 1–25 is individually inventive. None of Appellants' arguments persuasively show that some **inventive concept** arises from the **ordered combination** of these steps or functions, which, even if true, would be unpersuasive given that we conclude Appellants' claims are directed to ordinary steps (or functions) in data analysis, and are recited in the ordinary order, i.e., following a general pattern of collecting, analyzing, and

communicating the results of the analyzed information. *See Elec. Power*, 830 F.3d at 1355.

The "machine-or-transformation" (MoT) test

As recognized by the Federal Circuit in *Ultramercial, Inc. v. Hulu*, *LLC*, 772 F.3d 709, 715–16 (Fed. Cir. 2014), the "machine-ortransformation" (MoT) test, as outlined in *In re Bilski*, 545 F.3d 943, 954 (Fed. Cir. 2008), can provide a "useful clue" in the second step of the *Alice* framework. Under *Bilski's* MoT test, a claimed process is patent-eligible under § 101 if:

- (1) it is tied to a particular machine or apparatus; or
- (2) the process transforms a particular article into a different state or thing. *Bilski*, 545 F.3d at 954 (citing *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972)).

Here, we conclude none of Appellants' claims 1–25 is tied to a **particular** machine or apparatus, nor involved in any type of **transformation** of any **particular article**.<sup>2</sup>

In contrast to *DDR Holdings* and *Enfish*, in which the Federal Circuit held that claims directed to specific improvements in Internet or computer capabilities are patent-eligible subject matter, Appellants' claims are not

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<sup>&</sup>lt;sup>2</sup> See Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1344–45 (Fed. Cir. 2013) (claims reciting "generalized software components arranged to implement an abstract concept [of generating insurance-policy-related tasks based on rules to be completed upon the occurrence of an event] on a computer" not patent eligible); Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1333–34 (Fed. Cir. 2012) ("[s]imply adding a 'computer aided' limitation to a claim covering an abstract concept, without more, is insufficient to render [a] claim patent eligible" (internal citation omitted)).

directed to improving any type of Internet or computer capabilities, such as with *Enfish's* "self-referential table for a computer database." *Enfish*, 822 F.3d at 1336. We find "transaction data associated with a purchase of an item by a cardholder using the transaction card" (claim 1), by itself, does not transform an otherwise-abstract process or system of information collection and analysis. *See id.* Like the claims considered by the court in *Electric Power*, we conclude Appellants' claims 1–25 "do not invoke any assertedly inventive programing" or require an "arguably inventive set of components or methods." 830 F.3d at 1355.

We find Appellants' claimed invocations of conventional, off-the-shelf computer components are insufficient to pass as an inventive set of components. As such, our review of the claims, fully considering each claim's elements (both individually and as an ordered combination), fails to show that the nature of any of Appellants' claims 1–25 is transformed into patent-eligible subject matter.

In the Final Rejection (4) the Examiner further concludes:

[t]he claims do not set forth the specific technical processes required to execute the 'using the price tracking computer device to t[r]ack changes . . .' step. Thus, any manner of price tracking performed by the price tracking computer device (and subsequent comparison) would be effectively 'tied up' by the present claims.

In the Reply Brief (2–3), Appellants respond: "the Board must reject the Examiner's assertion that the claimed recitations are somehow fundamental truths that, as cited by the Examiner, preempt all possible ways of, for example, processing transaction requests, directing transaction data, and tracking changes in price."

Although the extent of preemption is a consideration, the absence of complete preemption is not dispositive. *See, e.g., Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) ("While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility."). The Federal Circuit further guides:

[T]he Supreme Court has stated that, even if a claim does not wholly pre-empt an abstract idea, it still will not be limited meaningfully if it contains only insignificant or token pre- or post-solution activity—such as identifying a relevant audience, a category of use, field of use, or technological environment.

Ultramercial Inc. v. Hulu LLC, 722 F.3d 1335, 1346 (Fed. Cir. 2013) (citations omitted), vacated and remanded, WildTangent, Inv. v. Ultramercial LLC, 134 S. Ct. 2870 (2014) (remanding for consideration in light of Alice, 134 S. Ct. 2347).

Applying this reasoning here, we conclude each of Appellants' claims 1–25 is directed to a patent-ineligible abstract concept, and does not recite something "significantly more" under the second step of the *Alice* analysis. Accordingly, for the reasons discussed above, we sustain the Examiner's rejection under 35 U.S.C. § 101 of claims 1–25, as being directed to non-statutory subject matter in light of *Alice* and its progeny.

# Reply Brief

To the extent Appellants advance new arguments in the Reply Brief not in response to a shift in the Examiner's position in the Answer, we note arguments raised in a Reply Brief that were not raised in the Appeal Brief or are not responsive to arguments raised in the Examiner's Answer will not be considered except for good cause. *See* 37 C.F.R. § 41.41(b)(2).

## **DECISION**

We affirm the Examiner's decision rejecting claims 1–25 under 35 U.S.C.  $\S$  101.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

## **AFFIRMED**